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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Helfgott & Karas, P.C.
60th Floor
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New York, NY 10118-6098

EXAMINER

LEVITAN, DMITRY

ART UNIT	PAPER NUMBER
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2662

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/723,117

Applicant(s)

TSUKAMOTO, KEIICHIRO

Examiner

Dmitry Levitan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-9 and 11 is/are rejected.
- 7) ☒ Claim(s) 5, 6 and 10 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

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Amendment, filed on 07/26/04, has been entered. Claims 1-11 remain pending.

Drawings

In light of Applicant's corrections, the objections to the drawings have been withdrawn.

Specification

In light of Applicant's corrections, the objections to the specification have been withdrawn.

Claim Rejections - 35 USC § 112

In light of Applicant's corrections, the rejections of claims 1-10 under first paragraph of 35 U.S.C. 112 have been withdrawn.

In light of Applicant's corrections, the rejections of claims 2, 5 and 8 under second paragraph of 35 U.S.C. 112 have been withdrawn.

Claim Rejections - 35 USC § 102

Claims 1-4 and 7-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Takemura (US 6,671,271).

Regarding claims 1 and 7, Takemura teaches an ATM cell service apparatus and method (network element 10 on Fig. 1 and 6:32-42) which accommodates an ATM cell in a SONET network through an asynchronous communication network (ATM/STM or ATM service units on Fig. 1 and 6:54-67, 7:1-10), comprising:

- a. A SONET signal terminating unit (line unit 30 on Fig. 1 and 6:43-48);

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- b. An asynchronous communication network signal terminating unit (ATM/STM or ATM service units on Fig. 1 and 6:54-67, 7:1-10);
- c. First and second ATM cell extraction units to extract ATM cells from a SONET signal and a signal of the asynchronous network (inherently part of the bi-directional signal routing ASIC 102 on Fig. 7, as it extracts virtual tributaries within the received frames/cells 11:44-54 and ATMU receivers 108 on Fig. 7 extracting data from the cells);
- d. First and second ATM mapping units to map the extracted cells in a SONET signal and a signal of the asynchronous network (inherently part of bi-directional signal routing ASIC 102 on Fig. 7 as it perform formatting ATM cells into a cell stream 11:58-67 and ATMU transmitters operating in the opposite direction);
- e. First and second signal transmitting units to transmit a SONET signal (optical transmitter 106 on Fig. 7 and 11:37) and a signal of the asynchronous network (ATMU transmitters 110 on Fig. 7 and 11:39-40).

Regarding claims 2, 3, 8, Takemura teaches an optical synchronous communication network interface unit, common for SONET and ATM networks, connecting optical signals to an optical network (line unit 30 on Fig. 1 and 6:43-53) and ATM interface unit directly connecting a signal for an optical synchronous communications network to an ATM network (service unit 36 on Fig. 6 and 6:54-67, 7:1-10).

Regarding claims 4 and 9, Takemura teaches first and second extracting units (as disclosed above in the claims 1 and 7 rejection) sharing a part of hardware (synchronization clocks 12:44-54 or physical enclosure on Fig. 2).

Claim Rejections - 35 USC § 103

2. In light of Applicant's remarks, noting that Takemura reference and the present application are commonly owned by Fujitsu, the rejections of claims 4, 6 and 10 have been withdrawn.

3. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Irwin (US 5,862,136) in view of Kuwahara (US 6,646,992).

Irwin substantially teaches the limitations of claim 11, including an apparatus to accommodate an ATM cells for synchronous and asynchronous networks (communication facility on Fig. 5 accommodating irregular ATM cells and SONET 12:43-59) and a detection unit (cell loss detector 982 on Fig. 23 and 40:5-8).

Irwin does not teach a cell insertion unit mapping an IDLE and Unassigned cell on the detection result.

Regarding the IDLE cells insertion, Kuwahara teaches a cell insertion unit mapping an IDLE cell on the detection result (idle cell generating circuit 103 On Fig. 2 and idle cells insertion in absence of valid data 7:60-67, 8:58-64).

Regarding to the insertion of unassigned cells, Official notice is taken that Unassigned cells are well known in the art, used for maintaining synchronization in the system in absence of data cells.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a cell insertion unit mapping an IDLE and Unassigned cell into a synchronous frame of Kuwahara to the system of Irwin to ensure that the system synchronization is maintained.

Allowable Subject Matter

4. Claims 4, 6 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

5. Applicant's arguments filed 07/20/2004 have been fully considered but they are not persuasive.

On pages 10-11 of the Response, Applicant argues that the present application is distinguishable from the reference because it addresses DS3 signal accommodating ATM cells.

Examiner respectfully disagrees.

Takemura teaches DS3 signal accommodating ATM cells (2:17-27) and DS3 signal features, like DS3 payload associated with SONET, are not claimed (see claims 1-11).

On page 11 of the Response, Applicant argues that Takemura fails to teach or suggest subject matter of independent claims 1 and 7 and dependent claims 2-4 and 8-9.

Examiner respectfully disagrees.

Applicant provided no arguments to support this statement. The features of the invention, related to the "DS3 twist" are irrelevant, as they are not directly claimed.

Examiner therefore believes that the cited references meet all the claims limitations and the rejection is proper.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Levitan whose telephone number is (571) 272-3093. The examiner can normally be reached on 8:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Dmitry Levitan
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10/28/04.



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